		Exploring Aerona	utics				
		2005 Science					
Curriculum Framework							
Arkansas Science							
Grade 5							
Activity/Lesson	State	Standards					
Fundamentals of		SCI.5.ESS					
Aeronautics (145-176)	AR	10.5.4	Distinguish between mass and weight				
Airplane Control(209-	7.4.4	10.0.1	Compare and contrast potential energy and				
256)	AR	SCI.5.PS.6.5.4	kinetic energy as applied to motion				
Airplane Control(209-	,	00	Classify real world examples as potential energy				
256)	AR	SCI.5.PS.6.5.5	or kinetic energy as applied to motion				
200)	,	00 0.0.0.0	Compare and contrast potential energy and				
How an Airplane Flies	AR	SCI.5.PS.6.5.4	kinetic energy as applied to motion				
Tiow arry arplane i nee	7.0.0	001.0.1 0.0.0.1	Classify real world examples as potential energy				
How an Airplane Flies	AR	SCI.5.PS.6.5.5	or kinetic energy as applied to motion				
Science of Flight	AR	SCI.5.NS.1.5.1	Make accurate observations				
Ocience of Flight	/ IX	001.0.140.1.0.1	Identify and define components of experimental				
		SCI.5.NS.1.5.2.	design used to produce empirical evidence				
Science of Flight	AR	a	(hypothesis)				
Science of Flight	AIX	a	Communicate results and conclusions from				
Science of Elight	AR	SCI.5.NS.1.5.5	scientific inquiry				
Science of Flight Integrating with	AK		Interpret scientific data using (stem and leaf				
	A.D.		, ,				
Aeronautics	AR	е	plots)				
Colontific Mathed (104		COLE NO 4 E O	Identify and define components of experimental				
Scientific Method(124-	A.D.	SCI.5.NS.1.5.2.	design used to produce empirical evidence				
144)	AR	а	(hypothesis)				
Scientific Method(124-	A.D.	00LE NO 4 E E	Communicate results and conclusions from				
144)	AR	SCI.5.NS.1.5.5	scientific inquiry				
Scientific Method(124-	A.D.	00LE NO 4 E 0	Define and sive evenue of by mothers				
144)	AR	SCI.5.NS.1.5.9	Define and give examples of hypotheses				
		Exploring Aerona	lutics				
		2005 Science					
		Curriculum Frame	ework				
Arkansas Science							
Grade 6							
Activity/Lesson	State	Standards					
Fundamentals of			Conduct investigations of various forces using				
Aeronautics (145-176)	AR	SCI.6.PS.6.6.3	SI units (newton)				
Fundamentals of			Describe the effects of force (move a stationary				
Aeronautics (145-176)	ΛD	SCI.6.PS.6.6.7.a	,				
ACIONAUNOS (140-170)		301.0.F3.0.0.1.a	object)				
Fundamentals of			Describe the effects of force (speed up class				
	AD	SCI & DS & & 7 h	Describe the effects of force (speed up, slow				
Aeronautics (145-176)	\rangle \rangl	301.0.53.0.0.7.0	down or change the direction of motion)				
Fundamentals of			Conduct investigations to demonstrate change				
Aeronautics (145-176)	ΛD	SCI.6.PS.6.6.8	Conduct investigations to demonstrate change in direction caused by force				
Acionaulics (140-170)		SCI.0.F3.0.0.0	ווו מוויבטווטוו טמעאבע שאַ וטונפ				

Fundamentals of			Conduct investigations to calculate the change			
Aeronautics (145-176)	AR	SCI.6.PS.6.6.9	in speed caused by applying forces to an object			
Acionautics (140-170)		001.0.1 0.0.0.3	Describe the effects of force (move a stationary			
How an Airplane Flies	AR	SCI.6.PS.6.6.7.a	,			
riow arr Airpiane riics		001.0.1 0.0.0.7.4	Describe the effects of force (speed up, slow			
How an Airplane Flies	AR	SCI 6 PS 6 6 7 h	down or change the direction of motion)			
Science of Flight	AR	SCI.6.NS.1.6.1	Verify accuracy of observations			
Ocicioc of Flight		SCI.6.NS.1.6.2.	Apply components of experimental design used			
Science of Flight	AR	a	to produce empirical evidence (hypothesis)			
Coloride of Flight	7 11 1	u	Communicate results and conclusions from			
Science of Flight	AR	SCI.6.NS.1.6.5	scientific inquiry			
Scientific Method(124-	7 11 1	SCI.6.NS.1.6.2.	Apply components of experimental design used			
144)	AR	a	to produce empirical evidence (hypothesis)			
Scientific Method(124-	7 4 4	u	Communicate results and conclusions from			
144)	AR	SCI.6.NS.1.6.5	scientific inquiry			
177)	7 11 1	001.0.110.11.0.0	oleritine inquiry			
Exploring Aeronautics						
		2005 Science				
		Curriculum Frame				
Arkansas Science						
Grade 7						
Activity/Lesson	State	Standards				
7 to a 11 ty = 2000 to 1						
		SCI.7.NS.1.7.2.	Analyze components of experimental design			
Science of Flight	AR	a	used to produce empirical evidence (hypothesis)			
			Communicate results and conclusions from			
Science of Flight	AR	SCI.7.NS.1.7.5	scientific inquiry			
J			Compare and contrast hypotheses, laws, and			
Science of Flight	AR	SCI.7.NS.1.7.9	theories			
Scientific Method(124-		SCI.7.NS.1.7.2.	Analyze components of experimental design			
144)	AR	а	used to produce empirical evidence (hypothesis)			
Scientific Method(124-			Communicate results and conclusions from			
144)	AR	SCI.7.NS.1.7.5	scientific inquiry			
Scientific Method(124-			Compare and contrast hypotheses, laws, and			
144)	AR	SCI.7.NS.1.7.9	theories			
		Exploring Aerona	utics			
		2005 Science				
		Curriculum Frame	ework			
Arkansas Science						
Grade 8						
Activity/Lesson	State	Standards				
_		SCI.8.NS.1.8.2.	Evaluate the merits of empirical evidence based			
Science of Flight	AR	а	on experimental design (hypothesis)			
_			Formulate a testable problem using			
Science of Flight	AR	SCI.8.NS.1.8.3	experimental design			
			Evaluate the merit of hypotheses, laws, and			
Science of Flight	AR	SCI.8.NS.1.8.11	theories			
Scientific Method(124-			Justify conclusions based on appropriate and			
144)	AR	SCI.8.NS.1.8.1	unbiased observations			
,	1	,				

Scientific Method(124-		SCI.8.NS.1.8.2.	Evaluate the merits of empirical evidence based
144)	AR	a	on experimental design (hypothesis)
Scientific Method(124-			Formulate a testable problem using
144)	AR	SCI.8.NS.1.8.3	experimental design
Scientific Method(124-			Communicate results and conclusions from
144)	AR	SCI.8.NS.1.8.7	scientific inquiry following peer review
Scientific Method(124-			Evaluate the merit of hypotheses, laws, and
144)	AR	SCI.8.NS.1.8.11	theories